Marc KachelrieÃ

List of Publications by Year
in descending order

49 papers	1,152 citations	393982 19 h-index	395343 33 g-index
49 all docs	49 docs citations	49 times ranked	1516 citing authors

#	Article	IF	Citations
1	Performance of today's dual energy CT and future multi energy CT in virtual nonâ€contrast imaging and in iodine quantification: A simulation study. Medical Physics, 2015, 42, 4349-4366.	1.6	181
2	Recent developments of dual-energy CT in oncology. European Radiology, 2014, 24, 930-939.	2.3	84
3	4D respiratory motionâ€compensated image reconstruction of freeâ€breathing radial MR data with very high undersampling. Magnetic Resonance in Medicine, 2017, 77, 1170-1183.	1.9	71
4	Deep Scatter Estimation (DSE): Accurate Real-Time Scatter Estimation for X-Ray CT Using a Deep Convolutional Neural Network. Journal of Nondestructive Evaluation, 2018, 37, 1.	1.1	68
5	Realâ€time scatter estimation for medical CT using the deep scatter estimation: Method and robustness analysis with respect to different anatomies, dose levels, tube voltages, and data truncation. Medical Physics, 2019, 46, 238-249.	1.6	65
6	Investigation of the halo-artifact in 68Ga-PSMA-11-PET/MRI. PLoS ONE, 2017, 12, e0183329.	1.1	53
7	Advanced abdominal imaging with dual energy CT is feasible without increasing radiation dose. Cancer Imaging, 2016, 16, 15.	1.2	52
8	Artifactâ€resistant motion estimation with a patientâ€specific artifact model for motionâ€compensated coneâ€beam CT. Medical Physics, 2013, 40, 101913.	1.6	51
9	Selfâ€adapting cyclic registration for motionâ€compensated coneâ€beam CT in imageâ€guided radiation therapy. Medical Physics, 2012, 39, 7603-7618.	1.6	44
10	Priorâ€based artifact correction (PBAC) in computed tomography. Medical Physics, 2014, 41, 021906.	1.6	31
11	Robust primary modulationâ€based scatter estimation for coneâ€beam CT. Medical Physics, 2015, 42, 469-478.	1.6	31
12	Respiratory motion compensation for simultaneous PET/MR based on highly undersampled MR data. Medical Physics, 2016, 43, 6234-6245.	1.6	28
13	Noise reduction and functional maps image quality improvement in dynamic CT perfusion using a new k-means clustering guided bilateral filter (KMGB). Medical Physics, 2017, 44, 3464-3482.	1.6	27
14	Improved clinical workflow for simultaneous whole-body PET/MRI using high-resolution CAIPIRINHA-accelerated MR-based attenuation correction. European Journal of Radiology, 2017, 96, 12-20.	1.2	24
15	MLAA-based attenuation correction of flexible hardware components in hybrid PET/MR imaging. EJNMMI Physics, 2017, 4, 12.	1.3	22
16	Empirical Cupping Correction for CT Scanners with Primary Modulation (ECCP). Medical Physics, 2012, 39, 825-831.	1.6	21
17	An efficient computational approach to model statistical correlations in photon counting xâ€ray detectors. Medical Physics, 2016, 43, 3945-3960.	1.6	21
18	4DMRI-based investigation on the interplay effect for pencil beam scanning proton therapy of pancreatic cancer patients. Radiation Oncology, 2019, 14, 30.	1.2	21

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19	The application of metal artifact reduction (MAR) in CT scans for radiation oncology by monoenergetic extrapolation with a DECT scanner. Zeitschrift Fur Medizinische Physik, 2015, 25, 314-325.	0.6	20
20	Highâ€quality initial imageâ€guided 4D CBCT reconstruction. Medical Physics, 2020, 47, 2099-2115.	1.6	20
21	The rotate-plus-shift C-arm trajectory. Part I. Complete data with less than 180Â° rotation. Medical Physics, 2016, 43, 2295-2302.	1.6	18
22	4D dose calculation for pencil beam scanning proton therapy of pancreatic cancer using repeated 4DMRI datasets. Physics in Medicine and Biology, 2018, 63, 165005.	1.6	18
23	Effects of arm truncation on the appearance of the halo artifact in 68Ga-PSMA-11 (HBED-CC) PET/MRI. European Journal of Nuclear Medicine and Molecular Imaging, 2017, 44, 1636-1646.	3.3	17
24	Effects of ray profile modeling on resolution recovery in clinical CT. Medical Physics, 2014, 41, 021907.	1.6	16
25	Scatter correction using a primary modulator on a clinical angiography Câ€arm CT system. Medical Physics, 2017, 44, e125-e137.	1.6	12
26	Assessment of dedicated low-dose cardiac micro-CT reconstruction algorithms using the left ventricular volume of small rodents as a performance measure. Medical Physics, 2014, 41, 051908.	1.6	11
27	In Vivo Quantification of Myocardial Infarction in Mice Using Micro-CT and a Novel Blood Pool Agent. Contrast Media and Molecular Imaging, 2017, 2017, 1-7.	0.4	11
28	MRâ€“Consistent Simultaneous Reconstruction of Attenuation and Activity for Nonâ€“TOF PET/MR. IEEE Transactions on Nuclear Science, 2016, 63, 2443-2451.	1.2	10
29	The impact of 2D cine MR imaging parameters on automated tumor and organ localization for MR-guided real-time adaptive radiotherapy. Physics in Medicine and Biology, 2018, 63, 235005.	1.6	10
30	Comparing the effectiveness and efficiency of various gating approaches for PBS proton therapy of pancreatic cancer using 4D-MRI datasets. Physics in Medicine and Biology, 2019, 64, 085011.	1.6	10
31	Synthetic 4D-CT of the thorax for treatment plan adaptation on MR-guided radiotherapy systems. Physics in Medicine and Biology, 2019, 64, 115005.	1.6	10
32	CycN-Net: A Convolutional Neural Network Specialized for 4D CBCT Images Refinement. IEEE Transactions on Medical Imaging, 2021, 40, 3054-3064.	5.4	9
33	Motion vector field phase-to-amplitude resampling for 4D motion-compensated cone-beam CT. Physics in Medicine and Biology, 2018, 63, 035032.	1.6	8
34	Two methods for reducing moving metal artifacts in coneâ€beam <scp>CT</scp>. Medical Physics, 2018, 45, 3671-3680.	1.6	8
35	Monitoring cardiac motion in CT using a continuous wave radar embedded in the patient table. Medical Physics, 2014, 41, 081908.	1.6	7
36	Dose reduction potential in diagnostic single energy CT through patientâ€specific prefilters and a wider range of tube voltages. Medical Physics, 2022, 49, 93-106.	1.6	7

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37	Alpha image reconstruction (AIR): A new iterative CT image reconstruction approach using voxel-wise alpha blending. Medical Physics, 2014, 41, 061914.	1.6	6
38	Delayed contrast dynamics as marker of regional impairment in pulmonary fibrosis using 5D MRI - a pilot study. British Journal of Radiology, 2020, 93, 20190121.	1.0	6
39	Artifact model-based respiratory motion compensation (MoCo) for simultaneous PET/MR based on strongly undersampled radial MR data. , 2014, , .		4
40	The rotate-plus-shift C-arm trajectory. Part II. Exact reconstruction from less than 180Â° rotation. Medical Physics, 2016, 43, 2303-2310.	1.6	4
41	The value of iterative metal artifact reduction algorithms during antenna positioning for CT-guided microwave ablation. International Journal of Hyperthermia, 2019, 36, 1222-1231.	1.1	4
42	CT-based attenuation correction of whole-body radiotherapy treatment positioning devices in PET/MRI hybrid imaging. Physics in Medicine and Biology, 2020, 65, 23NT02.	1.6	4
43	Digitization and visibility issues in flat detector CT: A simulation study. , 2012, , .		3
44	An adaptive genetic algorithm for misalignment estimation (AGAME) in spiral, sequential and circular cone-beam micro-CT. , 2011, , .		2
45	Running prior for patient motion correction in low-dose 3D+time interventional flat detector CT. , 2012, , .		1
46	Singular value-guided similarity filter improves detection of vessels in low-dose dynamic CT angiography: application to DIEP flap studies. Physics in Medicine and Biology, 2018, 63, 165003.	1.6	1
47	Reducing intra plane blurring in dental panoramas. , 2012, , .		0
48	CT data completion based on prior scans. , 2012, , .		0
49	MLAA-based headphone attenuation estimation in hybrid PET/MR imaging. , 2016, , .		0